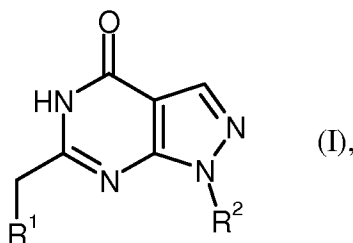


This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Previously presented) A compound of the formula



in which

R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, where C<sub>1</sub>-C<sub>8</sub>-alkyl is optionally substituted by oxo, and

where C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl and C<sub>3</sub>-C<sub>8</sub>-cycloalkyl are optionally substituted by up to 3 radicals independently of one another selected from the group of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, halogen, trifluoromethyl, trifluoromethoxy, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio,

where

C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl,

heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula -NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> are independently of one another hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

or

R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R<sup>2</sup> is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, trifluoromethoxy, amino, nitro, hydroxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, halogen, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio,

where C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy-carbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula -NR<sup>3</sup>R<sup>4</sup>,

where

$R^3$  and  $R^4$  have the meanings indicated above,

or a salt thereof.

**2. (Previously presented)** The compound of claim 1, where

$R^1$  is  $C_1$ - $C_8$ -alkyl,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -alkynyl or  $C_3$ - $C_8$ -cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy,  $C_1$ - $C_6$ -alkylamino, halogen,  $C_6$ - $C_{10}$ -arylcarbonylamino,  $C_1$ - $C_6$ -alkylcarbonylamino,  $C_1$ - $C_6$ -alkylaminocarbonyl,  $C_1$ - $C_6$ -alkoxycarbonyl,  $C_6$ - $C_{10}$ -arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino,  $C_1$ - $C_6$ -alkylsulphonylamino,  $C_1$ - $C_6$ -alkylsulphonyl and  $C_1$ - $C_6$ -alkylthio,

where  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -alkylamino,  $C_6$ - $C_{10}$ -arylcarbonylamino,  $C_1$ - $C_6$ -alkylcarbonylamino,  $C_1$ - $C_6$ -alkylaminocarbonyl,  $C_1$ - $C_6$ -alkoxycarbonyl,  $C_6$ - $C_{10}$ -arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino,  $C_1$ - $C_6$ -alkylsulphonylamino,  $C_1$ - $C_6$ -alkylsulphonyl and  $C_1$ - $C_6$ -alkylthio are optionally substituted by a radical selected from the group of hydroxy, cyano, halogen, hydroxycarbonyl and a group of the formula  $-NR^3R^4$ ,

where

$R^3$  and  $R^4$  are independently of one another hydrogen or  $C_1$ - $C_6$ -alkyl,

or

$R^3$  and  $R^4$  together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R<sup>2</sup> is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, nitro, hydroxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, halogen, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio,

where C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy-carbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, hetero-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio are optionally substituted by a radical selected from the group of hydroxy, cyano, halogen, hydroxycarbonyl and a group of formula -NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> have the meanings indicated above,

or a salt thereof.

**3. (Previously presented)** A compound of claim 1, where

R<sup>1</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl or C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, hydroxycarbonyl, cyano, amino, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkylamino, trifluoromethyl, fluorine, chlorine, bromine, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-aryl-

aminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio,

where C<sub>1</sub>-C<sub>4</sub>-alkyl and C<sub>1</sub>-C<sub>4</sub>-alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula –NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> are independently hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,

or

R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are bonded are 5- to 6-membered heterocyclyl,

R<sup>2</sup> is phenyl, pyrimidyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyrimidyl, pyridyl N-oxide and pyridyl are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkylamino, fluorine, chlorine, bromine, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonyl, and C<sub>1</sub>-C<sub>4</sub>-alkylthio,

where C<sub>1</sub>-C<sub>4</sub>-alkyl and C<sub>1</sub>-C<sub>4</sub>-alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula –NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> have the meanings indicated in claim 1,

or a salt thereof.

**4. (Previously presented)** A compound of claim 1, where

$R^1$  has the meanings indicated in claim 1, and

$R^2$  is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt thereof.

**5. (Previously presented)** A compound of claim 1, where

$R^1$  is  $C_1$ - $C_5$ -alkyl or  $C_5$ - $C_6$ -cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of  $C_1$ - $C_4$ -alkyl, trifluoromethyl, fluorine, hydroxy, phenylcarbonylamino,  $C_1$ - $C_4$ -alkylcarbonylamino,  $C_1$ - $C_4$ -alkylaminocarbonyl or phenylaminocarbonyl, and

$R^2$  is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt thereof.

**6. (Previously presented)** A compound of claim 1, where

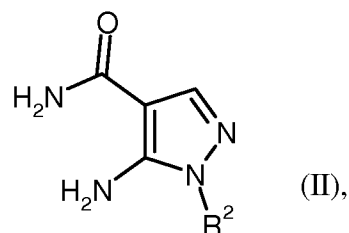
$R^1$  is  $C_1$ - $C_5$ -alkyl or  $C_5$ - $C_6$ -cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of  $C_1$ - $C_4$ -alkyl, fluorine, trifluoromethyl, hydroxy, phenylcarbonylamino,  $C_1$ - $C_4$ -alkylcarbonylamino,  $C_1$ - $C_4$ -alkylaminocarbonyl or phenylaminocarbonyl, and

$R^2$  is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by one radical and pyridyl and pyridyl N-oxide are optionally substituted by one radical in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt thereof.

7. **(Withdrawn)** A process for preparing a compound according to claim 1, comprising:

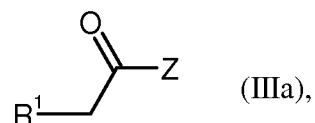
[A] converting a compound of the formula



in which

$R^2$  has the meanings indicated in claim 1,

by reaction with a compound of the formula

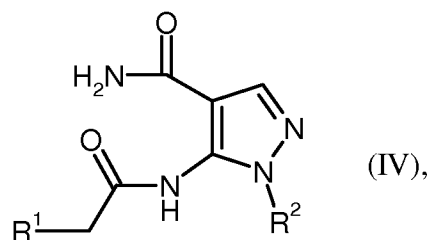


in which  $R^1$  has the meanings indicated in claim 1,

and

Z is chlorine or bromine,

in an inert solvent and in the presence of a base, initially into a compound of the formula



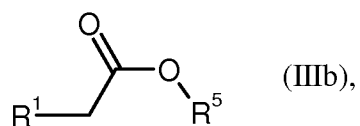
in which

R<sup>1</sup> and R<sup>2</sup> have the meanings indicated in claim 1,

and then cyclizing in an inert solvent in the presence of a base to a compound of the formula (I),

or

[B] reacting a compound of the formula (II) with a compound of the formula



in which

R<sup>1</sup> has the meanings indicated in claim 1,

and

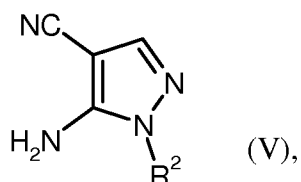
R<sup>5</sup> is methyl or ethyl,



in an inert solvent and in the presence of a base, with direct cyclization to a compound of formula (I),

or

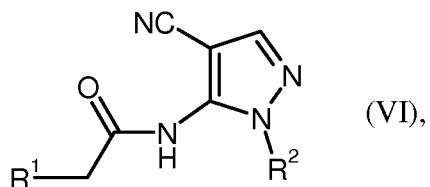
[C] converting a compound of the formula



in which

$R^2$  has the meanings indicated in claim 1,

initially by reaction with a compound of the formula (IIIa) in an inert solvent and in the presence of a base into a compound of the formula



in which

$R^1$  and  $R^2$  have the meanings indicated in claim 1,

and cyclizing the compound for formula (VI) in a second step in an inert solvent and in the presence of a base and of an oxidizing agent to a compound of (I),

and the resulting compounds of the formula (I) are where appropriate reacted with the appropriate bases or acids to give a salt thereof.

**8. (Cancelled)**

9. **(Previously presented)** A pharmaceutical composition comprising at least one compound of any one of claims 1 to 6 and at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
10. **(Cancelled)**
11. **(Cancelled)**
12. **(Cancelled)**
13. **(Withdrawn)** A method for the treatment of impairments of perception, concentration, learning and/or memory in a human or animal comprising administering an effective amount of a compound of any one of claims 1 to 6 to the human or animal.
14. **(Withdrawn)** The method according to Claim 13, where the impairment is a consequence of Alzheimer's disease.
15. **(Withdrawn)** A method for producing a medicament useful for treating an impairment of perception, concentration, learning and/or memory in a human or animal, comprising providing a compound according to claim 1 or a salt thereof in a form useful for treating perception, concentration, learning and/or memory in a human or animal.
16. **(Withdrawn)** The method according to Claim 15, where the impairment is a consequence of Alzheimer's disease.
17. **(Currently amended)** A pharmaceutical composition comprising a compound according to claim 1 or a salt thereof, as the active moiety, and at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.